

Director's Corner

Bart Pickelman, CIH, Director



With the construction season in full swing over the last few months, there was no shortage of summer activity here at MIOSHA. As commercial and residential construction projects forged ahead, our staff were out in full force providing consultative assistance and helping to enforce safety and

health rules and regulations that protect Michigan's workforce.

Along with these and other routine visits, the MIOSHA team covered major ground this summer — traveling across the state to visit an additional 101 worksites to help employers proactively identify and address workplace hazards, improve their safety and health programs and stand up for worker safety. The visits were part of MIOSHA's 18th annual **Take a Stand Day** — a yearly opportunity for employers to request free, one-on-one consultations to bolster worker protections without any citations or penalties. This year, we were pleased to collaborate with 52 returning participants and 49 new companies who took advantage of our consultations to enhance employee protections and strengthen their safety cultures.

While Take a Stand Day only happens once a year, there are endless opportunities to partner with us and access our free services to level up your workplace safety. In fact, you can take advantage of our wide range of customized services year-round at no cost to your company. Plus, when you request help, you'll face zero citations or penalties and can receive special awards and recognition. That's right — cost- and penalty-free help for your workplace, anytime and anywhere.

It's always the right time to choose safety. [Find the consultative service](#) that's right for you and [learn how you can partner with us](#) to further protect your workforce and bottom line.



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The MIOSHA Training Institute (MTI) Introduces New Pilot Course

Gloria Keene, MTI Program Coordinator, Consultation Education and Training (CET) Division

You asked and we listened! Due to overwhelming feedback from the public, MIOSHA created a new and exciting course on required written programs, entitled *MIOSHA General Industry Safety Documentation – Are You in Compliance?*

On Oct. 12, 2022, the MIOSHA Training Institute (MTI) will pilot this dynamic full-day course at Grand Valley State University in Grand Rapids. In return for your input, MIOSHA invites you to attend the pilot at half the cost of a regular, full-day MTI program.

This program is an in-depth review of MIOSHA's general industry safety required written programs, inspections and permits. Participants who want to learn what programs require written policies or documentation such as reporting and recording of occupational injuries and illnesses, emergency exits, and personal protective equipment, won't want to miss this course.

The course is also for employers who must perform MIOSHA's required inspections of equipment or machinery at their workplaces. They'll learn how to help workers properly document inspections, as well as gain familiarity with the permitting requirements to operate specific equipment.

Ultimately, this course can help employers and employees decrease the number of hazards, exposure to hazards, injuries, illnesses, fatalities and near misses in workplaces.

MIOSHA will add the new course to its current list of electives for the General Industry Level 1 Certificate Program in the coming year. The abbreviated format of the current Required Written Programs course will remain part of MIOSHA's General Industry 10-Hour Program.

To learn more about this course or the MTI and what it can do for you, contact MIOSHA'S Consultation Education and Training Division at 517-284-7720 or visit www.michigan.gov/mti.



MVPP Best Practices — W.R. Grace & Co.

Mike Helms, Health and Safety Manager, W.R. Grace & Co.



After an incident at one of our previous owners' sites, we saw an opportunity to re-evaluate our tool policy. This included inspections of corded equipment, fixed equipment and hand tools. A cross-functional team consisting of site leadership, EHS and area owners were tasked with performing a detailed inspection of equipment.

These are a few observations that were made during our inspection, and actions that were taken to address the hazards:

- The grinder bench rested too far away from the wheel, and we were not performing a "ring" test on new abrasive wheels. As a result, job aids and gap tools were placed at all grinder locations.

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MVPP Best Practices *(continued)*

Mike Helms, Health and Safety Manager, W.R. Grace & Co.

- Our fixed equipment did not have drop-off protection to prevent the automatic restarting of equipment after a power outage. To address this, we added portable drop-off protection to all fixed equipment that did not have it at the breaker.
- Across the site, all exposed or improperly repaired electrical wires and cords were removed from service and replaced.
- The site purchased a Clare Safe Check tester to check Class 1 (metal case), Class 2 (double insulated) and extension cords for any defects. After checking all corded tools, we removed 42% of the inspected equipment from service and disposed of it. This was no easy task and came at a great financial cost to the site, but significantly improved our corded policy program.



Today, the site continues to do pre-use visual inspections and regularly checks equipment with the Clare tester. Additionally, equipment that is brought onsite from contractors is inspected and we repair or dispose of failed equipment for them.

Significant Case Study — Oil Rig Fire

Joseph Bantau, Workplace Safety Representative, General Industry Safety and Health Division (GISHD)



On Nov. 26, 2019, a flash fire broke out at an oil rig in northern Michigan, killing one employee and leaving another employee seriously injured with severe burns. The flash fire occurred during a mechanical integrity test of a dormant oil well.

Four oil and gas contractors took part in the testing, which lasted over a week. During that time, the work crews ran into heavy paraffin wax build-up inside the oil well and decided to use a highly flammable chemical to remove the obstruction.

Employees first attempted to use a seven million-BTU-hot oiler truck with a pump truck to help break up the heavy paraffin wax build-up. The crews pumped barrels of brine into the well with the hot oiler truck and then suctioned the brine out into a nearby open-top tank with the pump/

vacuum truck.

When that method did not work, the crews used natural-gas condensate to break up the paraffin wax in the oil well. Natural-gas condensate is a category 1 flammable liquid with a flashpoint of -40 Fahrenheit. Its safety data sheet stated that an explosion hazard may form from an explosive vapor-air mixture under the right circumstances.

Approximately 45 barrels of natural-gas condensate were pumped into the well casing, followed by 12 barrels of lite brine. The crews continued circulating the natural-gas condensate through the well into the open-top tank throughout the next two workdays.

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Significant Case Study *(continued)*

Joseph Bantau, Workplace Safety Representative, GISHD

Employees reported vapors coming off the open-top tank approximately five minutes before the flash fire occurred. Once the fire erupted, it quickly spread, and flames reached approximately 55 feet in the air. The MIOSHA investigation determined that the contractors' attempts to remove the paraffin wax build-up created a petroleum-vapor-enriched atmosphere due to mixing natural-gas condensate and brine in the open-top tank. Employees stated that due to the enriched atmosphere, the diesel engine on the pump truck was idling at a much higher RPM than normal. This would have been due to the additional fuel pulled into the engine through the air intake.

MIOSHA's GISHD conducted separate investigations of the four contractors involved in the multi-employer worksite and issued citations for their failure to follow these regulations:

- 408.1011(a): [Act 154, Michigan Occupational Safety and Health Act](#). An employer shall furnish to each employee, employment and a place of employment that is free from recognized hazards that are causing, or are likely to cause, death or serious physical harm to the employee.
- 1910.307(b): [GI Part 39, Design Safety Standards for Electrical Systems](#). All areas designated as hazardous (classified) locations under the Class and Zone system and areas designated under the Class and Division system established after August 13, 2007 shall be properly documented. This documentation shall be available to those authorized to design, install, inspect, maintain, or operate electric equipment at the location.
- 408.15711(1)(a): [GI Part 57, Oil and Gas Drilling and Servicing Operations](#). The employer shall provide training to an employee regarding the operating procedures, hazards, and safeguards of the assigned task, including the safe handling and use of hazardous substances and the personal protective equipment required.
- 408.15714(1): [GI Part 57, Oil and Gas Drilling and Servicing Operations](#). Smoking, open fires, or other potential sources of ignition shall be permitted only in designated areas located at a safe distance from the wellhead or flammable liquid storage areas. Operations or areas which constitute a fire hazard shall be conspicuously posted with a sign. "NO SMOKING OR OPEN FLAME."
- 408.15737(1): [GI Part 57, Oil and Gas Drilling and Servicing Operations](#). A pit or tank used to circulate flammable materials shall be located not less than 100 feet from the well. Equivalent safety measures shall be taken where terrain and location conditions do not permit maintaining such distance.
- 408.15741(1): [GI Part 57, Oil and Gas Drilling and Servicing Operations](#). The supervisor of the special service shall hold a pre-job meeting with each crew to review responsibilities for the operation to be performed.
- 408.15764(3): [GI Part 57, Oil and Gas Drilling and Servicing Operations](#). When pumping a flammable fluid, both of the following provisions shall be complied with:
 - (a) Blending equipment shall be grounded and equipment unloading sand into the hopper shall be bonded to the blending equipment.
 - (b) The lines containing the flammable fluid shall not be laid under any vehicle.



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Significant Case Study *(continued)*

Joseph Bantau, Workplace Safety Representative, GISHD

- 1910.106(b)(2)(iv)(f)(1): [GI Part 75, Flammable Liquids](#). Tanks and pressure vessels storing Category 1 flammable liquids shall be equipped with venting devices which shall be normally closed except when venting to pressure or vacuum conditions. Tanks and pressure vessels storing Category 2 flammable liquids and Category 3 flammable liquids with a flashpoint below 100° F (37.8 °C) shall be equipped with venting devices which shall be normally closed except when venting under pressure or vacuum conditions, or with approved flame arresters.
- 1910.106(b)(6): [GI Part 75, Flammable Liquids](#). "Sources of ignition." In locations where flammable vapors may be present, precautions shall be taken to prevent ignition by eliminating or controlling sources of ignition. Sources of ignition may include open flames, lightning, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, and mechanical), spontaneous ignition, chemical and physical-chemical reactions, and radiant heat.

High-hazard Industry — Municipal Excavation

Eric Allen, Health and Safety Manager, Construction Safety and Health Division (CSHD)



On Nov. 27, 2018, a MIOSHA CSHD Workplace Safety Representative (WSR) discovered local municipality workers performing construction work on a residential water main break. When the WSR approached the jobsite, the foreman was in the excavation performing work activities while using a vacuum truck to control the water escaping the broken water main. The employer was not utilizing any of the employee protective methods in [Part 9, Excavation, Trenching, and Shoring](#), exposing the worker(s) to the hazards of the 6-foot-deep excavation walls. The WSR provided the employer with abatement methods while on-site. The employer was able to come into compliance and complete the necessary work by the end of the inspection and

was credited for their abatement efforts. Citations were issued to the employer, as listed below. MIOSHA urges all employers to assess their workplace for hazardous conditions, take the appropriate corrective actions to protect employees and remain in compliance with the applicable standards.

Note: Employers performing excavation work must comply with both [MIOSHA Part 9, Excavations, Trenching and Shoring](#), and [MISS DIG Underground Facility Damage Prevention and Safety Act, Public Act 174 of 2013](#). For more information, please refer to the [MIOSHA Fact Sheet MISS DIG: Public Act 174](#).

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High-hazard Industry *(continued)*

Eric Allen, Health and Safety Manager, CSHD

MIOSHA Construction Safety and Health Standard Rules cited related to this inspection:

[Part 1. General Rules](#); Rule 408.40114(1): An employer shall develop, maintain, and coordinate with employees an accident prevention program, a copy of which shall be available at the worksite.

[Part 6. Personal Protective Equipment](#); Rule 1926.100(a) Employees working in areas where there is a possible danger or head injury from impact, or from falling or flying objects, or from electrical shock and burns, shall be protected by protective helmets.

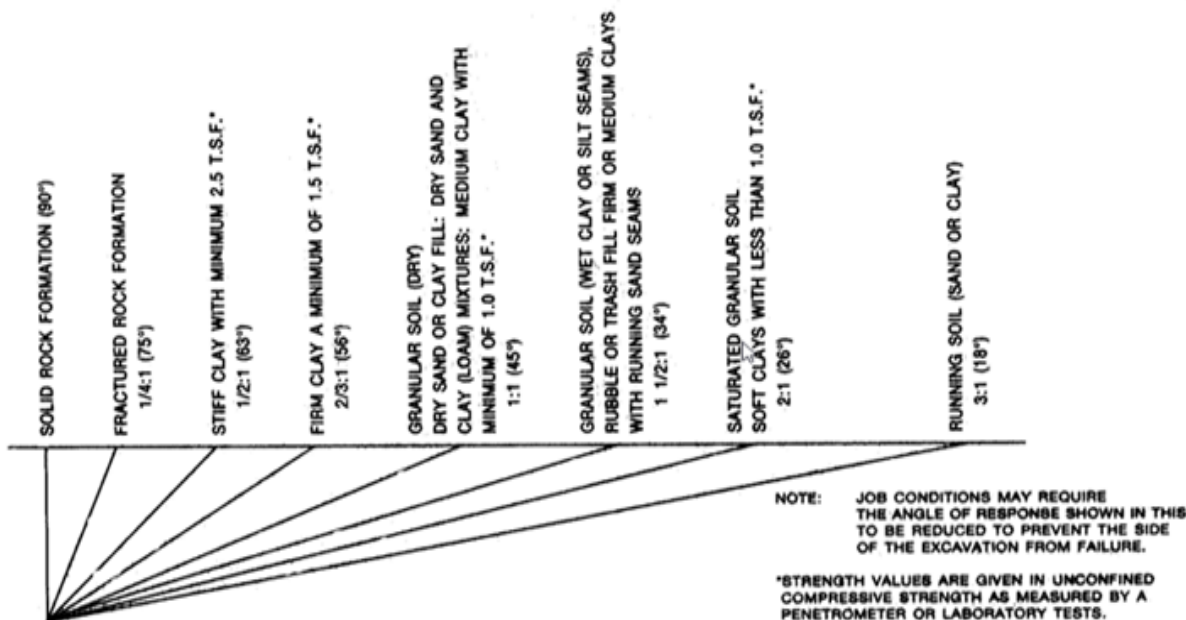
[Part 9. Excavation, Trenching, and Shoring](#); Rule 408.40941(1): The side of an excavation more than 5 feet deep shall be sloped as prescribed in table 1, unless supported as prescribed in this part.

[Part 15. Excavators, Hoists, Elevators, Helicopters, and Conveyors](#); Rule 408.41523(1): A thorough, annual inspection of all excavators shall be made by a qualified person. An employer shall maintain, on the jobsite or attached to the equipment, a copy of the latest equipment inspection record with the date and results for each piece of equipment.

The MIOSHA CSHD encourages employers to be aware of the hazards presented by excavations. [Federal OSHA deemed excavations the agency's priority goal](#). Unfortunately, excavation fatalities continue to occur around the country and here in Michigan. We encourage all employers to slope, shore or shield excavations.

MIOSHA urges employers to go above and beyond MIOSHA standards, which are the minimum requirements. The [MIOSHA CET Division](#) provides [onsite consultation, hazard surveys and training to employers](#) and offers a variety of safety and health training courses through the [MIOSHA Training Institute](#). If you are interested in free assistance, please complete the MIOSHA CET [request for consultative assistance](#) form. Additionally, you may refer to our webpage specifically dedicated to [excavation and trenching](#) hazards for more information.

TABLE 1
MAXIMUM ALLOWABLE ANGLE OF REPOSE FOR THE SIDE OF AN EXCAVATION IN EXCESS OF 5' DEPTH



Partnerships, Alliances and Awards

Tanya Baker, Communications Specialist, CET Division

MIOSHA Forms and Renews Alliances with Several Organizations



Mechanical Contractors Association of Detroit (MCA Detroit)

In early September, MIOSHA and MCA Detroit formed a new alliance to help more workers in the mechanical construction and service industry to foster safer, more healthy workplaces. The formal alliance agreement

will help raise awareness of MIOSHA's protection initiatives for mechanical service practices, while strengthening education, outreach and training to protect more plumbers, pipefitters and HVAC service technicians. Some of the alliance activities will include encouraging MCA Detroit members to utilize free MIOSHA Consultation Education and Training services to survey potential hazards and jointly developing a training that addresses commonly encountered hazards.

"MCA Detroit recognizes that the most important metric in our industry is safety," said Chief Executive Officer **Christopher Freeman**. "Aligning our interests with MIOSHA shows that our goal of 'safety first' is not just a maxim — we are taking action to ensure we are not only providing the safest workforce in Michigan, but also building a trusted environment for our high-demand, high-paying career field."

Through the three-year written agreement, MCA Detroit partners will gain greater understanding of emphasis programs and occupational safety and health standards pertaining to the mechanical contracting industry, as well as the rights of workers and the responsibilities of employers under the Michigan Occupational Safety and Health Act. The team will meet at least three times per year to track and share information on activities and results in achieving the goals of the alliance.

American Society of Safety Professionals and Great Lakes Safety Training Center

On Aug. 23, 2022, MIOSHA and the **ASSP Greater Detroit, West Michigan and Mid-Michigan Chapters** and the **GLSTC** renewed their alliance at the GLSTC facilities in Midland, MI. The alliance renewal signing ceremonies coincided with a Coffee with MIOSHA event facilitated by the ASSP, during which MIOSHA Director Bart Pickelman presented to an audience of nearly 50 attendees.



AMERICAN SOCIETY OF
SAFETY PROFESSIONALS

ASSP has been instrumental in facilitating Coffee with MIOSHA events across the state and increasing awareness of MIOSHA and the Consultation Education and Training (CET) Division's free consultation and hazard survey services.



That same day, the GLSTC and MIOSHA had a ceremonial alliance signing to celebrate the renewal of their alliance that occurred remotely on June 2, 2021. The purpose of the alliance is to increase and promote on the job safety and health to GLSTC membership, improve their safety and health systems, and create better communication between GLSTC members and MIOSHA for the benefit of a safer workforce. The greatest

value the alliance provides, in addition to the outreach and safety training which GLSTC already committed to, is the ability to continue to connect and educate employers/employees throughout the state of Michigan.

The MIOSHA Alliance Program is open to all groups — including trade or professional organizations, government agencies, labor organizations and educational institutions — in industry sectors where MIOSHA doesn't typically have a robust presence. Additional information on how to form an alliance with MIOSHA to promote safer, more healthful workplaces can be found at www.michigan.gov/alliance.

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Partnerships, Alliances and Awards *(continued)*

Tanya Baker, Communications Specialist, CET Division

Michigan Companies Retain Star Status in Workplace Safety and Health



Huntsman Corporation — Auburn Hills Facility

MIOSHA is pleased to recognize the Huntsman Corporation Auburn Hills facility for retaining its Michigan Voluntary Protection Program (MVPP) Star Status for upholding safety and health

measures that go above and beyond MIOSHA standards. The polyurethane product development operation continues to implement a wide range of worker safety best practices, including its strong focus on employee participation and management involvement. From site inspections to self-audits and safety cross meetings, employees participate in a variety of health and safety programs and are encouraged to track and address workplace hazards on a regular basis.

Marathon Petroleum Company — Lansing Light Products Terminal Fleet

MIOSHA proudly recognizes Marathon Petroleum Company's Lansing site, which is a bulk receiving, storage and distribution facility of refined petroleum products, for its continued status as a MVPP Star site. Among its best practices, the site continues to excel in the identification and control measures for addressing safety concerns, including utilizing new tools and engineering solutions to control ergonomic risks and using robotic tank inspections to eliminate tank entries and associated hazards.



MillerKnoll — Zeeland Site

MIOSHA is pleased to recertify the MillerKnoll worksite in Zeeland as a MVPP Star site. The manufacturer of office furniture, work surfaces and other office furniture-related products boasts several occupational safety and health best practices, including the addition of automation to its production systems to reduce employee exposure to hazards and a full-time ergonomic specialist to focus on mitigating those hazards to employees.

"Retaining the star certification recognizes the outstanding achievements of our team to manage our safety program, making our operations a safer and better place for all our associates," said Francisco Henriquez, MillerKnoll vice president of manufacturing. "I am delighted to get this recognition for the hard work and close collaboration of our operations and safety team at MillerKnoll, a true testament to our commitment to live our purpose and value as a company."

Standards Update

Shannon Matsumoto, Manager, Standards and FOIA Section, Technical Services Division (TSD)

MIOSHA is in the process of reviewing GISHD Standard Part 73. Fire Brigades. In the last edition of the MIOSHA news, it was noted that MIOSHA had completed revisions for the GISHD Part. 74 Fire Fighting, so what is the difference between the two standards?

Part. 74 Fire Fighting contains rules that apply to public or municipal (State, county, city, etc.) firefighters and equipment. Part. 73 Fire Brigades contains rules that apply to industrial fire departments and private or contractual-type fire departments.

The proposed changes to Part. 73 are similar to the changes that were made to Part. 74. in 2022. In 2020, Public Act 291 of 1966, The Fire Fighters Training Council Act was amended. Due to this amendment, the Bureau of Fire Services suggested that MIOSHA review and update the Part 74 Fire Fighting standard 1403 standard on Live Fire Training Evolutions. Since fire brigade employees perform many of the same tasks as fire fighters, the suggestion applies to both groups.

In addition, the Michigan Occupational Safety and Health Act, act 154 of 1974, was also amended, requiring the Director of Labor and Economic Opportunity to promulgate rules regarding an employee/firefighter's use of firefighting foam concentrate containing intentionally added perfluoroalkyl substance (PFAS).

MIOSHA will also be asking the advisory committee to review the requirements covering firefighting equipment as well as personal protective equipment to determine if the requirements need to be updated to better protect brigade members.

Check the [MIOSHA standards page](#) for final versions upon approval.

Variances

Variances from MIOSHA standards are available to the public in accordance with Administrative Standards for All Industries, Part 12. Variances (R408.22201 to 408.22251). MIOSHA variances are published on the MIOSHA website: michigan.gov/mioshavariances.



Mission:

To Protect the Safety and Health of Michigan Workers.

The MIOSHA News is a publication of the MIOSHA program.

Its purpose is to educate Michigan employers and employees about workplace safety and health. We encourage reprinting.

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